## Annual Drinking Water Quality Report for 2008 City of Taneytown

**May 6, 2009** PWSID 0060012

We would like to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water is supplied by eight wells located throughout the City, which draw from the New Oxford aquifer (or Formation). Each well has its own chlorine disinfection treatment system. The finished (treated) water from each well is pumped into a distribution piping system, which includes two storage tanks.

We have a Source Water Assessment Plan available from our office that provides more information such as potential sources of contamination. This plan is also available from Maryland Department of the Environment (MDE) or at the Carroll County Public Library.

We are pleased to report that our drinking water meets federal and state requirements.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact the City Office at 410-751-1100 between the hours of 8:30A.M. and 4:30 P.M. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Council meetings. They are held on the second Monday of each month at 7:30 P.M. at the City Office.

We have learned through our monitoring and testing that some contaminants have been detected in the City's drinking water supply. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The City of Taneytown routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the next page shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup> 2008.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Inorganic Contaminants									
Contaminant	Violation Yes/No	Level Detected	Unit Measure -ment	MCLG	MCl	Likely Source of contamination			
Barium (2006 – 2007)	No	0.17 - 0.24 (range)	ppm	2	2	Erosion of natural deposits			
Fluoride (2006 – 2008)	No	ND-0.18 (range)	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth.			
Lead (distribution)	No	7.0 (90% value)	ppb	n/a	15 (Action level)	Corrosion of household plumbing systems, erosion of natural deposits			
Copper (distribution)	No	0.26 (90% value)	ppm	n/a	1.3 (Action level)	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			
Nitrate (as Nitrogen)	No	1.4 - 3.6 (range)	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits			
Volatile Organic Contaminants									
1,1 – Dichloroethylene	No	ND-0.8 (range)	ppb	7	7	Discharge from industrial chemical factories			
Tetrachloroethylene	No	ND-4.4 (range)	ppb	0	5	Industrial solvents, discharge from factories and dry cleaners, leaching from pipes			
Haloacetic Acids (distribution) (2006)	No	4.19	ppb	0	60	By-product of drinking water chlorination			
TotalTrihalomethanes (distribution) (2006)	No	ND	ppb	n/a	80	By-product of drinking water chlorination			
Trans - 1,2 - Dichloroethylene	No	ND – 1.5	ppb	100	100	Discharge from industrial chemical factories			
			oactive Co	ntaminan					
Adjusted Gross Alpha Activity	No	5.0–19.0 (range) * See explanation below	pCi/1	0	15	Erosion of natural deposits			
Combined Radium (Radium 226 & 228) (2006-2008)	No	0.2 – 7.0 (range) * See explanation below	pCi/1	0	5	Erosion of natural deposits			
Combined Uranium (Uranium 234, 235, & 238)(2007-2008)	No	1.0 – 130 (range)	pCi/l	0	30	Erosion of natural deposits			
Beta/photon emitters0 (2006 – 2008)	No	ND-16 (range)	pCi/1	0	50	Decay of natural and man-made deposits			
Synthetic Organic Contaminants including Pesticides and Herbicides									
Di(2-ethylhexyl) phthalate (2006-2008)	No	ND – 1.1 (range)	ppb	0	6	Discharge from rubber and chemical factories			

Unregulated Contaminants								
Sodium (2006-2008)	No	15.9-30.4 (range)	ppm	n/a	n/a	Erosion from natural deposits		

Radon-222	No	ND-2,045	pCi/l	n/a	n/a	Erosion from natural deposits
		(range)				, -
Metolachor	No	0.62 - 2.6	ppb	n/a	n/a	By- product of chlorine disinfection
		(range)	11			
Bromodichloromehane	No	ND - 0.7	ppb	n/a	n/a	By- product of chlorine disinfection
Dibromochloromethane	No	ND – 1.4	ppb	n/a	n/a	By- product of chlorine disinfection
Bromoform	No	ND - 0.7	ppb	n/a	n/a	By- product of chlorine disinfection

Note: Test results are for 2008 unless otherwise indicated; all contaminants are not required to be tested for on an annual basis.

\*Results for Adjusted Gross Alpha and Combined Radium (Radium 226 & 228) indicate ranges of detection (highs & lows). Regulated maximum contaminant (MCL) levels allowed for both Adjusted Gross Alpha and Combined Radium are based on a four-quarter average (12 month period). Water Samples are collected at point of entry from each well, where it first enters the water distribution system. Although State and Federal maximum contaminant levels were not exceeded, Well #13 was taken out of service in March 2009, as a precautionary measure, pending the installation of a filtration system to remove the contaminants of concern.

MCL's (Maximum contaminant levels) EPA generally sets MCL's at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

<u>Hardness</u>: Water is a strong solvent that dissolves varying amounts of mineral substances. Calcium and magnesium are the principle mineral contaminants that cause water to be "hard". The average hardness, system wide, in Taneytown is 250 ppm. (17.1ppm = 1 grain). While not a health concern, high levels of hardness can cause other issues such as spots on dishes, and the need to use extra soap for bathing, dishes, laundry, and hot water scaling.

Radon: Radon is a radioactive gas that you cannot see, taste, or smell. It is throughout the United States and can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known carcinogen. Breathing air-containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon is 4 Pico Curies per liter of air (pCi/l) or higher. There are simple ways to fix a radon problem that aren't costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON). 4000 pCi/l in water = 0.4 pCi/l in the air.

<u>Lead</u>: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Taneytown is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

<u>Nitrates:</u> in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activities. If you are caring for an infant you should ask advice from your health care provider.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Please call our office if you have questions. We at the City of Taneytown work around the clock to provide top quality water at every tap. We ask that all our consumers, who are the heart of our community, help us protect our water because our way of life and our children's future depends on it.